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SEP 13 2006

IN THE CLAIMS

1 (Currently Amended). An apparatus, comprising:

a storage device to store data; and

a block to adjust the position of the data in the storage device to account for a sampling rate of the apparatus being different than a rate of the received data, wherein the block comprises a sampling block to sample incoming data using a plurality of sampling clocks to provide a plurality of samples.

2 (Original). The apparatus of claim 1, wherein the block adjusts a portion of the data in response to receiving a plurality of bits in response to sampling a portion of an incoming data.

3 (Original). The apparatus of claim 1, wherein the block comprises a detector to detect the at least one sampling error.

4 (Original). The apparatus of claim 3, comprising a counter block to provide a clock substantially synchronous with the data in response to detecting the at least one sampling error.

Claim 5 (Canceled).

6 (Currently Amended). The apparatus of claim [[5]] 1, wherein the block comprises a multiplexer to receive the plurality of samples and provide a desirable sample to the storage device from the plurality of samples in response to a control signal.

7 (Currently Amended). The apparatus of claim [[5]] 1, including a detector block to adjust the position of the data based on detecting at least one of a phase lag and a phase lead based on the plurality of samples.

8 (Original). The apparatus of claim 1, wherein the block does not shift the data in response to detecting duplicate sampling values of incoming data.

9 (Original). The apparatus of claim 1, wherein the storage device is a variable shift register.

10 (Currently Amended). An apparatus, comprising:

a sampling block to sample incoming data using a plurality of sampling clocks to provide a plurality of samples;

a detector block to detect when the frequency of a sampling clock is different from the rate of the incoming data; and

a storage device to adjust the position of the data in response to detecting the difference in frequency of the sampling clock and the incoming data, wherein the storage device is a shift register.

Claim 11 (Canceled).

12 (Currently Amended). The apparatus of claim [[11]] 10, wherein the storage device is a variable shift register.

13 (Original). The apparatus of claim 12, further comprising a counter block to count a number of shifts of the variable shift register.

14 (Original). The apparatus of claim 13, further comprising a comma detect block to reset the counter block in response to detecting a unique sequence of bits.

15 (Original). The apparatus of claim 13, wherein the counter block is one of a variable shift register and an adder circuit.

16 (Original). The apparatus of claim 13, wherein the detector is one of a phase detector and an edge detector.

17 (Original). The apparatus of claim 10, wherein the sampling block samples the incoming data using three sampling clocks to provide three samples.

18 (Original). The apparatus of claim 10, further comprising a multiplexer to receive the plurality of samples and provide desirable sample from the plurality of samples to the storage device based on a control signal from the detector block.

19 (Previously Presented). An apparatus, comprising:

a clock block to generate a plurality of sampling clocks;
a sampling block to sample data using the plurality of sampling clocks to generate a plurality of sample values;
a detector block to detect that the frequency of a sampling clock is different from the frequency of the data being sampled; and
a shift register to receive at least one of the plurality of sample values and to shift the at least one of the plurality of sample values in response to the difference in frequency between the sample clock and the sampled data.

20 (Original). The apparatus of claim 19, wherein the detector is an edge detector.

21 (Original). The apparatus of claim 19, wherein the shift register is a variable shift register.

22 (Currently Amended). A method comprising:
storing data in a storage device; and
adjusting the location of the data in the storage device to account for a difference in the frequency of the sampling rate versus the data rate of the data being received in the storage;
sampling incoming data to provide a plurality of samples;
detecting at least one sampling error in the plurality of samples; and
selecting a desirable sample from the plurality of samples and storing the
desirable sample in the storage device.

Claims 23-25 (Canceled).

26 (Original). The method of claim 22, wherein sampling the incoming data comprises sampling the incoming data at a rate at least three times faster than the rate of the incoming data.

27 (Previously Presented). The method of claim 22, wherein adjusting the location comprises shifting the data by two locations in the storage device to account for sampling frequency being slower than a rate of an incoming data.

28 (Currently Amended). The method apparatus of claim 22, wherein adjusting the location comprises not shifting the data in the storage device to account for sampling frequency being faster than a rate of an incoming data.

Claims 29 and 30 (Canceled).

31 (New). An apparatus, comprising:

a storage device to store data; and

a block to adjust the position of the data in the storage device to account for a sampling rate of the apparatus being different than a rate of the received data, wherein the storage device is a variable shift register.

32 (New). The apparatus of claim 31, wherein the block comprises a detector to detect the at least one sampling error.

33 (New). The apparatus of claim 32, comprising a counter block to provide a clock substantially synchronous with the data in response to detecting the at least one sampling error.

34 (New). An apparatus, comprising:

a storage device to store data; and

a block to adjust the position of the data in the storage device to account for a sampling rate of the apparatus being different than a rate of the received data, wherein the block does not shift the data in response to detecting duplicate sampling values of incoming data.

35 (New). The apparatus of claim 34, wherein the storage device is a variable shift register.

36 (New). An apparatus, comprising:

a sampling block to sample incoming data using a plurality of sampling clocks to provide a plurality of samples;

a detector block to detect when the frequency of a sampling clock is different from the rate of the incoming data; and

a storage device to adjust the position of the data in response to detecting the difference in frequency of the sampling clock and the incoming data, wherein the sampling block samples the incoming data using three sampling clocks to provide three samples.

37 (New). An apparatus, comprising:

a sampling block to sample incoming data using a plurality of sampling clocks to provide a plurality of samples;

a detector block to detect when the frequency of a sampling clock is different from the rate of the incoming data; and

a storage device to adjust the position of the data in response to detecting the difference in frequency of the sampling clock and the incoming data, further comprising a multiplexer to receive the plurality of samples and provide desirable sample from the plurality of samples to the storage device based on a control signal from the detector block.

38 (New). A method comprising:

storing data in a storage device; and

adjusting the location of the data in the storage device to account for a difference in the frequency of the sampling rate versus the data rate of the data being received in the storage, wherein sampling the incoming data comprises sampling the incoming data at a rate at least three times faster than the rate of the incoming data.

39 (New). A method comprising:

storing data in a storage device; and

adjusting the location of the data in the storage device to account for a difference in the frequency of the sampling rate versus the data rate of the data being received in the storage, wherein adjusting the location comprises not shifting the data in the storage device to account for sampling frequency being faster than a rate of an incoming data.

40 (New). A method comprising:

storing data in a storage device; and

adjusting the location of the data in the storage device to account for a difference in the frequency of the sampling rate versus the data rate of the data being received in the storage, wherein adjusting the location comprises shifting the data by two locations in the storage device to account for sampling frequency being slower than a rate of an incoming data.